Giving Birth With Epidural Analgesia: The Experience of First-Time Mothers

Ryoko Hidaka, RN, CNM, MSN Lynn Clark Callister, RN, PhD, FAAN

ABSTRACT

The purpose of our qualitative descriptive study was to describe the birth experiences of women using epidural analgesia for pain management. We interviewed nine primiparas who experienced vaginal births. Five themes emerged: (a) coping with pain, (b) finding epidural administration uneventful, (c) feeling relief having an epidural, (d) experiencing joy, and (e) having unsettled feelings of ambivalence. Although epidural analgesia was found to be effective for pain relief and may contribute to some women's satisfaction with the birth experience, it does not guarantee a quality birth experience. In order to support and promote childbearing women's decision making, we recommend improved education on the variety of available pain management options, including their risks and benefits. Fostering a sense of caring, connection, and control in women is a key factor to ensure positive birth experiences, regardless of pain management method.

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Childbirth is a significant life event. Although most birth experiences are positive, some women perceive giving birth as a traumatic event and may even experience post-traumatic stress disorder (Beck, 2011; Elmir, Schmied, Wilkes, & Jackson, 2010). It is essential that nurses and childbirth educators understand how women experience birth and what factors influence their perceptions of giving birth.

The anticipated pain of childbirth is often a major concern for childbearing women. Changing social values and medical technology have influenced birth-related pain management options and choices (Zwelling, 2008). An increasing number of childbearing women in the United States

have epidural analgesia for childbirth. In 2008, researchers reported that women having a singleton vaginal birth in 27 states had epidural or spinal anesthesia (Osterman & Martin, 2011), and they projected that rates would likely increase after their 2008 review. Although epidural analgesia is an effective method of pain management (Anim-Somuah, Smyth, & Howell, 2005), risks are associated with the use of epidural analgesia. Moreover, the use of epidural analgesia may or may not contribute to women's satisfaction with

The words "epidural analgesia" and "epidural" are used interchangeably in this article.

the birth experience. For example, a woman who experienced an unmedicated birth with her second child reported, "[With my first baby,] the doctor encouraged me to have an epidural. Afterward I thought, 'This isn't childbirth. There's got to be more to it than just laying there with a numb body'" (Callister, Khalaf, Semenic, Kartchner, & Vehvilainen-Julkunen, 2003, p. 147).

An increasing body of literature documents the perceptions of childbearing women about their birth experiences across cultures and settings (Callister & Khalaf, 2009). Although these studies strengthen health-care providers' knowledge about women's experience of giving birth, the focus of these studies was not on women's satisfaction with childbirth pain management. Because many women currently giving birth in the United States have epidural analgesia, it is important to understand their perceptions of using epidurals in relation to the quality of their birth experiences.

Birth satisfaction is a complex and multidimensional concept (Christiaens & Bracke, 2007; Redshaw, 2008) and is not used interchangeably with the meaning of giving birth. In two systematic reviews, researchers identified the following factors associated with women's satisfaction with their childbirth experience: personal expectations, sense of control, caregiver support, the quality of the caregiver-patient relationship, and maternal involvement in decision making (Hodnett, 2002; Hodnett, Gates, Hofmeyr, Sakala, & Weston, 2011). Their findings are confirmed in additional studies in the literature (Bryanton, Gagnon, Johnston, & Hatem, 2008; Goodall, McVittie, & Magill, 2009; Rudman, El-Khouri, & Waldenström, 2007; Salter, 2009). In a study of first-time mothers, researchers concluded that "a positive birth experience does not exclude pain" (Dickinson, Paech, McDonald, & Evans, 2003, p. 467). The researchers found that pain relief during childbirth is not as significant in ensuring a positive birth experience as the factors identified in Hodnett's (2002) and Hodnett et al.'s (2011) reviews. Nevertheless, it is important to investigate and determine how pain management with epidurals, especially in primiparous women, contributes to women's satisfaction with their birth experience. Therefore, the purpose of this study was to understand the birth experiences of women using epidural analgesia for pain management.

Fostering a sense of caring, connection, and control in women is a key factor to ensure positive birth experiences, regardless of pain management method.

STUDY DESIGN AND METHODS

This qualitative descriptive study was conducted to gain a deeper understanding of life experiences (Van Manen, 1997). Giving birth is a unique and individualized experience involving complex emotions. This method generates rich qualitative data that provide a deeper understanding of women's perceptions of and satisfaction with pain management during childbirth. The two major questions that we asked study participants were "What was giving birth like for you?" and "How did having an epidural contribute to your birth experience?"

Study Participants and Data Collection

Following institutional review board approval, participants were recruited from childbirth education classes and on the mother/baby unit in a community hospital in the northeastern United States with an annual birth census of nearly 800. The nine study participants were primiparas who received epidural analgesia for pain management while giving birth vaginally to healthy, term infants.

After receiving informed consent and completing a demographic data form, we conducted 60- to 90-minute, audiotaped interviews in the homes of study participants 4–6 weeks after they had given birth. Long-term maternal recall related to giving birth is both reproducible and accurate (Simkin, 2006). Obstetrical data were obtained from medical records.

Data Analysis

The interviews were transcribed verbatim and the transcripts were proofread for accuracy. In the detailed reading, we examined every sentence or sentence cluster, asking, "What does this sentence or sentence cluster reveal about the experience being described?" Important sentences or clusters were labeled with tentative, emerging themes in the margin of the texts. The tentative themes were categorized into similar groups. The theme is "a fuller description of the structure of a lived experience" (Van Manen, 1997, p. 92). The thematic statements and sentence clusters for each theme (data bits) were selected from the text to capture

TABLE 1

Demographic Characteristics of Study Participants

Age (in Years)	Marital Status	Employment	Maternal Education
37	Married	Nurse	Associate degree
19	Married	Food services	High school diploma
23	Single	Manager	Master's degree
27	Married	Day care	College graduate
37	Married	Business	College graduate
28	Married	Accountant	College graduate
25	Married	Administrator	College graduate
20	Single	Unemployed	Junior high
33	Married	Chef	High school diploma

essential meanings of the themes. Sharing the voices of the women themselves makes the data transparent and the narrative bits open to multiple meanings. To gain deeper insight and understanding, we conducted a collaborative analysis. All themes were clarified with participants to ensure accuracy of the interpretation (member checks). The entire process was audited by a university-based nurse researcher with expertise in qualitative inquiry.

RESULTS

Characteristics of Participants and Their Births

The participants gave birth in a community hospital in the northeastern United States. All were White, with a mean age of 27.7 years. Seven were married and two were single. Maternal education ranged from not completing high school to having a graduate degree. Labor (first and second stages) ranged from 4 hours to over 20 hours. Length of labor before receiving an epidural ranged from nearly 3 hours to nearly 10 hours. The women tried nonpharmacological pain strategies such as walking, hydrotherapy, and massage prior to receiving epidurals. Cervical dilation at the time of the administration of epidural analgesia ranged from 4 to 8 cm. Four were induced and three had augmentation with Pitocin after receiving epidural analgesia. None of the study participants originally planned to have an epidural, except one of the women (Rebecca²) who said that media-related representations of labor and birth influenced her to change her mind from initially wanting an unmedicated birth to planning to have an epidural

prior to going into labor. See Table 1 and Table 2 for demographic and birth data.

Giving Birth Using Epidurals

Although the participants had experienced their birth using epidural analgesia, none recalled their births as being easy. One participant said, "Childbirth is an ordeal." Another said, "Childbirth is tough, but worth it." The rewards of giving birth and the deep emotion felt when they first saw their newborn overshadowed the challenges of the birth process.

The women's narratives generated the following themes related to their birth experiences: (a) coping with pain before opting for an epidural, (b) finding epidural administration uneventful, (c) feeling relief using an epidural, (d) experiencing joy, and (e) being left with unsettled feelings of ambivalence.

Coping with pain before opting for an epidural. All the participants had expected some discomfort, but they were unprepared for the intensity of the pain they experienced. Amy, whose labor was induced, described her pain in this way: "People told me that contractions are like very severe menstrual cramping, but these pains were like perforating the bowel, or [the] appendix rupturing." Other participants who were induced felt the intensity of strong contractions in a short time, as described by Debra: "Within 20 minutes, [I was] doubled over, heaving my guts out. I was in so much pain. It went [from] manageable pain to gripping the side of the bed."

Women tried to cope with the pain as long as they could before opting for an epidural. In addition to intense pain, they reported they had reached the limits of their strength. Gina had experienced painful prodromal labor for a week before active

²Participants' names are pseudonyms to ensure anonymity.

TABLE 2
Birth Data of Study Participants

Singleton or Multiple Birth	Length of First and Second Stages	Length of Labor Before EAA	Measurement of Cervix at EAA	Plan for EAA	Induction or Augmentation
Multiple	9h 42m	3h 32m	4cm	Try to avoid	Induction
Singleton	9h 38m	5h 48m	4cm	Plan to use	Induction
Singleton	11h 43m	4h 33m	4.5cm	No intention	Induction
Singleton	4h 37m	3h 42m	5cm	Try to avoid	Induction
Singleton	4h 59m	2h 42m	8cm	Try to avoid	Augmentation after EA
Singleton	7h 45m	2h 31m	7cm	Try to avoid	None
Singleton	13h 20m	9h 43m	4cm	Try to avoid	None
Singleton	9h 36m	6h 38m	6cm	Try to avoid	Augmentation after EA
Singleton	20h 42m	8h 07m	4cm	Try to avoid	Augmentation after EA

Note. EAA = epidural analgesia administration. EA = epidural analgesia.

labor. She suffered from sleep deprivation and went without food for many hours prior to giving birth. Gina described her struggle:

I didn't think [I was] ever going to have the baby when I was in labor . . . I felt a sense of hopelessness. [The pain] was intense and strong. But you take yourself to another place. You do your breathing techniques. You change positions. You have someone help you. I was just so exhausted. I honestly think that I could have handled the pain if I wasn't so tired and hungry. . . . I eventually asked for an epidural.

Lyndsey, who also experienced a lengthy labor and coped with labor pain and exhaustion, decided to request an epidural. She recalled,

I wasn't thinking much other than the next one's coming, because they were so close together . . . I just breathed through it. Sometimes I fell asleep between contractions, because I was so exhausted. I had enough. I couldn't do it anymore. I was thinking I'd rather die than go through this. Then I asked for an epidural.

Finding epidural administration uneventful. Receiving epidural analgesia was an unknown experience for study participants. Worries about the procedure itself were common. Rebecca recalled, "I remember worrying because of what I heard about the use of a big needle, and the risks and complications." Amy was also afraid: "I was scared,

nervous during [the] procedure." Gina expected "a very painful procedure." For Erica, who had enormous concern because her friend experienced complications after epidural administration, getting an epidural was "nerve racking." In contrast to their anxiety of receiving epidurals, all the women described the actual procedure positively, saying, "It wasn't a bad experience at all" and "I didn't feel anything" and "It didn't hurt at all."

Feeling relief using an epidural. All the women described feeling significant relief soon after receiving an epidural. Seven women rated labor pain as "zero" after having an epidural. Rebecca described the epidural as "a gift from above." Amy said with excitement, "As soon as he [the anesthesiologist] gave me a bolus of medication, I said to myself that there is a heaven. I was so relieved immediately." Cecilia described her feelings after an epidural:

You're kind of euphoric for a second. All pains are gone. You aren't tensed up anymore. You are relaxed and feel so much better. You can still feel some pressure of contractions, but you don't have constant pain going through your entire body.

Study participants said having an epidural had a positive impact on their birth experience, changing their challenging situations into something manageable and even enjoyable. Gina said her mood completely changed, remarking, "After I got an epidural, I didn't feel so exhausted and hopeless anymore. I was like, 'I can do this.' I wasn't scared anymore. I became very excited." Amy, who was completely satisfied with having an epidural, said, "It made my birth possible." Iris, who was determined to avoid having cesarean surgery, said, "There is no way that I was able to go through the vaginal birth without the epidural." Lyndsey described a dramatic shift in her labor after receiving an epidural: "It's a happier experience. I didn't feel so bad anymore. [I was] chatting, happy." Helena recalled, "It was one hundred percent better. It helped me a lot. I couldn't do it without it. And if I hadn't had an epidural, I don't think I would have enjoyed the birth."

When the women reached their limits of tolerable pain, especially for those who were induced, they were no longer consumed with pain but fully present. Cecilia said, "It gives you time to get used to what's going on, focusing. You are not in pain, but you can feel contractions. Before, you were too busy shoving your face into your pillow." Lyndsey described her experience: "The room came back into focus. I could focus more on what's happening." As Amy explained, she was able to be fully present in the birth process:

My body was only concentrated in pain. It was almost like I was not in the present. Once the pain was gone, I was able to concentrate on [the experience], concentrate on my husband, my sister, my nurse, the doctor. I could hear what [they] said, and [understood] what I needed to do. I do not think all those things would have been possible without the epidural.

Epidural analgesia provided rest and respite from exhaustion. For example, Amy expressed, "Enough time to generate the energy for pushing. It's like a rest period so the body can rejuvenate itself." Debra, who went through a 2-day induction and pushed for over 2 hours, said, "After the epidural, I slept pretty much until I pushed. Because I had been in labor for so long, I didn't know if I could make it to pushing if I didn't rest." Gina said, "I needed an epidural. Thank God. I needed a moment to collect myself. It really allowed me to relax, which was important, because without it I don't know where I would have gotten the energy to push."

Experiencing joy. Completing the birth and seeing their child was the most memorable moment for all the women during the labor and birth experience. Gina, who had initially been feeling helpless, recalled with tears, "Just feeling completely overwhelming

joy, extremely emotional. I couldn't believe he is finally here. I couldn't believe I did it. [It was] amazing and incredible." Rebecca described excitedly, "Oh my God, I just did that! I was waiting and finally he is here. It's just overwhelming. I never knew how much you could love somebody you just met."

The participants in the study discovered a new-found respect for women, including themselves, and made the positive transition to motherhood. Giving birth created positive feelings about, and respect for, womanhood, including a newfound respect for themselves. Lyndsey said, "I am so happy to be a woman and to be able to experience [giving birth]. I can't believe women go through [this] more than once. That's why I give women so much credit." Cecilia said, with amazement, "I just don't know how I could have done it, how my body went through all that. I have a lot of respect for women. I see my mom, she has four kids. I want to give her a medal for that." Erica claimed, "The birth experience made me feel like superwoman," and Gina noted, "I have a lot more respect for myself."

Rebecca spoke of women's ability to bring a new life into the world. She said, "My body made him. It makes you realize that's what life is all about. It's just a beautiful thing how women make babies." Debra, comparing women to men, said, "Men, they didn't have to go through labor. I feel like that is what makes women stronger. That's why we are the way we are."

Helena understood her birth as a turning point. She said, "I am definitely a different person. I am a mom now, which changes my whole life." For Cecilia, the difficulty of birth is symbolic of the challenges of motherhood:

[Giving birth] shows you how hard it will be to be a mother. It shows you how much responsibility [it is to be a mother]. It's not going to be easy from the beginning. The birthing is not easy. [But] when you see your son or daughter, it's a miracle. I think [that's] why it has to hurt so much. [When you] bring the child into the world, you realize how nothing is easy.

Debra, who had a difficult 42-hour labor, also recognized the parallels between giving birth and becoming a mother. She said,

You have to be so patient for her to get into the world. My labor showed me that you need to slow down in your life [as a mother]. You are a mom now, you can't pick your life the way you did before.

Being left with unsettled feelings. Although birth satisfaction was high among study participants, some women expressed unsettled feelings about the experience, which were too important to ignore. This theme of "being left with unsettled feelings" included feeling ambivalence, having insufficient information, and experiencing the effects of healthcare providers' attitudes.

Lyndsey and Erica were left with ambivalent feelings despite believing they had made the right choice concerning the use of epidurals during labor. Lyndsey said,

I didn't accomplish [birth] the way I wanted to. I didn't make it through without the epidural. I was a little disappointed that I did get one. On the other hand, it made me feel a lot better, made me happier, and I enjoyed the rest of the labor and birth experience. It was a kind of double-edged sword.

Lyndsey also explained her reason for having an epidural, saying, "I was nervous about lying down and being confined to the bed again." She wanted to stand or sit to cope with labor pain; however, many times she had to lie down for monitoring, and that position made her pain worse, so she was inclined to opt for an epidural. Erica, too, described her ambivalence. She said, "I wasn't sure that I wanted it because of my concerns for an epidural. I needed to do this naturally, [although] making the decision in the moment was absolutely the right one in order to help with the pain."

The risks and benefits of epidural analgesia were not clear to the women. Cecilia recalled, "Twice they put me on oxygen [because the baby's] heart rate went down. I freaked out. They didn't explain the reason." Gina experienced a similar episode. She said, "My blood pressure dropped. The baby's heart rate dropped to [the] seventies. I've heard a lot about epidurals from television and friends, but I didn't know that could happen." Some of the women had inaccurate information concerning epidurals. Iris said she thought that "because the medication from the epidural does not go into my blood stream, there would be no effect on the baby." Amy, who felt better when she saw her twins crying, said, "I was worried that the babies would be more lethargic and [that] I would be unable to breastfeed."

Three women (Cecilia, Lyndsey, and Debra) rated their satisfaction with their birth experience as less than 10 because of the way they were treated by health-care providers. Cecilia complained that no one had explained the reasons behind why she was placed on oxygen, which frightened her. Lyndsey said, "I was somewhat unhappy about my birth." She explained that when she first arrived at the hospital she felt nervous, and her anxiety was exacerbated after having been left alone during her initial assessment. Because of her pain, Lyndsey also wanted to stand up and walk around, but she was kept stationary while connected to a monitor.

I wanted to move. I wish they had checked sooner. It felt like such a long time lying there. I had hoped they were here more. I would have liked them to come in, and I did not want to lie down. I thought they didn't even care.

Debra, who experienced prolonged labor and pushed for more than 2 hours, and then had an instrumental vaginal birth, wanted to discuss the option of cesarean surgery during her labor, but her views were not solicited and her questions were not answered. Debra said, "I wasn't really satisfied." According to her, the birth experience became traumatic because of the attitudes of her providers. She said,

My on-call doctor was like, "You are going to have a natural birth, no option." I wish he listened to me more... even the nurse said that natural childbirth is best. I am sarcastic about it. Yes, it is scary. She [my daughter] was huge. I am only five feet. [They] let me go so long. At least they should have given me an option.

DISCUSSION

This study is limited to the experiences of nine first-time mothers and may not be representative of the childbirth experience of all primiparous women having epidural analgesia. One of the study participants had multiples, in which case an epidural may have been recommended. Nevertheless, listening to the voices of the women themselves can serve to increase awareness among nurses and childbirth educators of the perspectives of birthing women about pharmacological pain management (Callister, 2004; Carolan, 2006). Our findings confirm those of a recent systematic review of women's expectations and experience of pain relief in labor. Across studies, women underestimated the pain of childbirth, were not prepared for the intensity of the experience, and often had unrealistic expectations (Lally, Murtagh, Macphail, & Thomson, 2008).

Experiencing Joy

The women in this study described birth as bittersweet. All the participants had epidurals because they felt the need for it after confronting and dealing with intense pain and exhaustion. The pain and the effort required for labor brought these women to the limits of emotional and physical endurance, which was eventually overshadowed by the blessing of having given birth to a child. These experiences led the women to internalize their experience and to make sense of the childbirth experience as women and as mothers (Callister & Khalaf, 2009).

Making the Decision to Have an Epidural

All of the participants except one, Rebecca, did not want to have an epidural before going into labor. Rebecca, however, reported being influenced by media representations of birth. Childbirth educators need to inform women that reality television shows do not accurately portray birth and are not consistent with evidence-based clinical practice (Morris & McInerney, 2010; Theroux, 2011). Seven women initially wanted to avoid epidurals and one had no intention to have an epidural. Unmet expectations for pain management can lead to a less satisfying child-birth experience (Kannan, Jamison, & Datta, 2001).

In this study, six participants felt no conflict having received epidurals, whereas two expressed ambivalent feelings. Of those six, four participants' labor (Amy, Ceclia, Debra, and Iris) was induced or augmented, which increases the intensity of contractions. The remaining two, Gina and Helena, did not have oxytocin; however, in Gina's case, she went through a prolonged and difficult labor without food or drink because of hospital policy. Helena reported experiencing severe pain before resorting to an epidural. Because of their intense pain and exhaustion, the six participants felt on the edge of losing control of the birth process prior to receiving an epidural, which helped them keep control. The use of epidural analgesia did not make their birth less satisfying for these six women.

Feeling Relief With an Epidural

Epidural analgesia has the potential to contribute positively to women's birth experiences as an effective form of pain management. Some of the women in this study described feeling powerless during active labor. Such feelings of powerlessness as well as pain may increase a sense of trauma related to the lack of personal control (Soet, Brack, & Dilorio, 2003). In some instances, epidural analgesia helped

the women retain personal control over their birth process, which is related to women's satisfaction with their birth experience (Goodman, Mackey, & Tavakoli, 2004). After receiving an epidural, they felt a sense of relief and were able to relax. Epidural analgesia provided for a period of rest, allowing them to regain their energy before the next stage of pushing. Some women felt the birth process was enjoyable after the pain subsided. Epidural analgesia took away most of the pain but kept the women conscious and aware.

According to her perceptions of the pain she experienced, Rebecca did not reach a maximum threshold of pain. In Rebecca's case, planning to use an epidural led to an early administration of an epidural, which is consistent with the literature (Goldberg, Cohen, & Lieberman, 1999).

Being Left With Ambivalent Feelings

Two women in this study, Erica and Lyndsey, experienced ambivalent feelings about having an epidural. Both women felt that, during labor, making the choice to use an epidural was right, but they later expressed some ambivalence having chosen it. Neither had their labor induced or augmented. Erica described the situation when she decided to opt for an epidural: "My nurse asked me if I wanted to have an epidural now because an anesthesiologist happened to be on the floor. So I said, 'Yes!'" It might have been difficult for a woman experiencing painful contractions to turn down an epidural. Perceived lack of support from caregivers has a profound effect on laboring women's choices for pain management. Erica and Lyndsey might have given birth without an epidural if they had been approached differently by their nurses and had been supported with other methods of pain management, such as walking, showering, receiving a massage, or practicing focused breathing.

Caregiver Education, Assessment, and Support

The recently developed pain assessment tool for laboring women, the Coping with Labor Algorithim, is useful to discern whether women need intervention for pain and offers nonpharmacological care methods that nurses can suggest to laboring women (Gulliver, Fisher, & Roberts, 2008; Roberts, Gulliver, Fisher, & Cloyes, 2010). Penny Simkin also developed pain and coping rating scales that may be useful (Simkin & Hull, 2011). Asking the question, "How are you coping with labor?" is essential. The nurse can assist with multiple strategies for pain management. If a woman

chooses to have an epidural, asking "Is this helping?" and "How are you feeling?" is important.

Birth settings in hospitals that conform to the medical model in managing birth have a higher rate of epidural use and offer only limited support to a woman's inner ability to accomplish her birth without pain medication (Barrett & Stark, 2010; Marmor & Krol, 2002; Romano & Lothian, 2008). Payant, Davies, Graham, Peterson, and Clinch (2008) concluded that nurses' intentions to provide continuous labor support are lower for women receiving epidurals. Labor nurses have identified barriers to the provision of supportive care for childbearing women, some of which are related to the lack of skills in helping laboring women cope without medication (Carlton, Callister, Christiaens, & Walker, 2009). Childbirth educators and labor nurses have crucial and challenging roles in women's decision over whether to use and when to have epidurals for childbirth pain management. Nurses can be encouraged to seek labor support certification to enhance the birth experiences of mothers, regardless of women's choices for childbirth pain management (Adams & Bianchi, 2008; Bianchi & Adams 2009).

Research findings regarding the essential importance of advocacy and support were confirmed in a recent study of 13 grand multiparous women's perceptions of giving birth, nursing care, and the use of technology. Participants focused on the importance of providers establishing trust and rapport as well as providing reassurance and support versus relying on childbirth technology in the provision of care (Fleming, Smart, & Eide, 2011).

Educating women about the risks and benefits of epidural analgesia and obtaining informed consent are essential. In this study, all of the women were anxious about the administration of an epidural prior to receiving it. Some did not know the side effects of epidural use, and some were misinformed about it. Often, when laboring women consent to the use of an epidural, they are in severe pain. The experience of vulnerability, anxiety, pain, suffering, and fear can act as a barrier for women to fully understand what they are consenting to (Rosenthal, 2006; Torres & De Vries, 2009). Childbirth educators and nurses can be encouraged to fully inform women about the risks and benefits of epidural analgesia prior to labor (Lowe, 2004). Perinatal education and decision cards used during labor have been shown to be effective in providing appropriate information for childbearing women (Paech, 2006; Raynes-Greenow, Nassar, Torvaldsen, Trevena, & Roberts, 2010).

If women have access to a wide variety of comfort measures and are able to work actively with the increasingly powerful contractions as labor progresses, and if they have continuous emotional and physical support, they are less likely to need epidurals.

Media representations of childbirth do not realistically convey the birth experience and do not focus on evidence-based practice (Morris & McInerney, 2010; Theroux, 2011). Therefore, it is helpful if women are educated regarding reality television shows and birth. In addition, in a recent study of Internet use during pregnancy to inform decision making, 97% of women from 24 countries used the Internet for education and 94% used the Internet to supplement information provided by health professionals (Lagan, Sinclair, & Kernohan, 2010). Helping women develop skills for online data retrieval of quality sources, as well as interpreting and applying the information, can be added to perinatal education curricula.

Epidural analgesia does not necessarily guarantee women's satisfaction with childbirth. Epidural analgesia may contribute to women's birth satisfaction but, as demonstrated in this study, may not necessarily guarantee a highly satisfying birth experience. The attitude and actions of health-care providers have a profound effect on women's satisfaction with their childbirth experience. Three women in this study—Cecilia, Lyndsey, and Debra—indicated they were less than satisfied with their birth experiences regardless of the fact that they had epidural analgesia. Their reasons related to the manner in which they were treated by their health-care providers. Our findings, supported by two systematic reviews (Hodnett, 2002; Hodnett et al., 2011), suggest that the attitude of health-care providers toward childbearing women can be a crucial factor in determining women's satisfaction with giving birth. Women want both high-tech and high-touch care (Brown et al., 2009; Tiedje, Price, & You, 2008). The importance of providing explanations, a supportive attitude, and advocacy for women in birth cannot be overemphasized (Abushaikha & Sheil, 2006; Goldbort, 2009; Hodnett et al., 2011; Transforming Maternity Care Symposium Steering Committee et al., 2010; Transforming Maternity Care Vision Team et al., 2010).

CLINICAL IMPLICATIONS

Because four out of the nine participants in this study had elective inductions, we recommend that

perinatal nurses participate in quality improvement initiatives that promote evidence-based practice, especially practice related to elective induction. The Institute for Healthcare Improvement's (2011) "Elective Induction and Augmentation Bundles" may be helpful for perinatal nurses to review, as well as two reports of institutional experiences of standardizing criteria for scheduling elective labor inductions (Durham et al., 2008; Fisch, English, Pedaline, Brooks, & Simhan, 2009).

Nurses and childbirth educators have an important influence over women's decisions about childbirth with the provision of education that allows women to make informed choices and have a sense of shared power in their health-care decisions. As Kennedy and Lyndon (2008) noted, "Nurses are the frontline providers of birth care in the US for most women.... Nurses ... probably hold the great potential to influence the culture of birth" (p. 434). Helping a woman achieve a desired level of control is essential in promoting a positive birth experience with fulfilling lifelong memories of the experience (Goodman et al., 2004; Matthews & Callister, 2004; Simkin & Hull, 2011). Epidural analgesia can help women maintain personal control and may possibly contribute to positive birth experiences. At the same time, a woman's choice of whether to use and when to use an epidural must be carefully evaluated and supported

by health-care providers. Providing supportive care that allows laboring women to choose their preferred pain relief method, not merely the choice of an epidural, may help women maintain their sense of control and achieve their desired childbirth experience. As Romano and Lothian (2008) noted,

If women have access to a wide variety of comfort measures and are able to work actively with the increasingly powerful contractions as labor progresses, and if they have continuous emotional and physical support, they are less likely to need epidurals. (p. 100)

Offering informed choice during labor and birth, especially informed choice for labor pain management, is a documented ethical dilemma (Carlton, Callister, & Stoneman, 2005; Goldberg, 2009; Simmonds, 2008). Nevertheless, promoting childbearing women's choice and autonomy are important considerations when perinatal education and labor support are provided (Koehn, 2008; Lothian, 2008). Childbirth educators and nurses play an essential role in providing pregnant women with informed choices of birth options and pain relief interventions, including epidurals (see Table 3 and Table 4). According to the *Code of Ethics for Lamaze Certified Child-birth Educators* (Lamaze International, 2006):

Read the Code of Ethics for Lamaze Certified Childbirth Educators, available on the following link at the Lamaze International Web site: http://www.lamaze.org/Default.aspx?tabid=561

TABLE 3 Clinical Implications Based on the Literature Review and Findings From the Current Study Regarding Labor Pain Management

- Nurses and childbirth educators should promote positive and satisfying birth experiences regardless of pain management methods
 women chose to use
- Women should be educated about the risks and benefits of epidural analgesia, including the provision of information about appropriate Internet sites
- Use of the Coping with Labor Algorithm to assess pain in laboring women and individualize care with a variety of coping strategies is
 recommended
- Informational support, physical caring support, emotional support, and advocacy support are essential components of quality childbirth education and nursing care
- Epidurals, when given by maternal request, should be appropriately timed with support to reduce anxiety
- Strategies to support women's desire to have an unmedicated birth should be used
- · Lamaze certification is recommended

Note. Sources from the literature:

Adams, E. D., & Bianchi, A. L. (2008). A practical approach to labor support. *Journal of Obstetric, Gynecologic, and Neonatal Nursing, 37*(1), 106–115. Bianchi, A. L., & Adams, E. D. (2009). Labor support during second stage labor for women with epidurals: Births in this era is technology driven. Many women giving birth in hospital settings have epidurals for pain management. Yet laboring women need more than technology—they have basic needs that can't be addressed by technology alone. *Nursing for Women's Health, 13*(1), 38–47.

Goldbort, J. G. (2009). Women's lived experience of their unexpected birthing process. MCN: The American Journal of Maternal Child Nursing, 34(1), 57–62. http://dx.doi.org/10.1624/10581249?X396219

Lally, J. E., Murtagh, M. J., Macphail, S., & Thomson, R. (2008). More in hope than expectation: A systematic review of women's expectations and experience of pain relief in labour. *BMC Medicine*, 14(6), 7. http://dx.doi.org/10.1186/1741-7015-6-7

Roberts, L., Gulliver, B., Fisher, J., & Cloyes, K. G. (2010). The coping with labor algorithm: An alternate pain assessment tool for the laboring woman. Journal of Midwifery and Women's Health, 55(2), 107–116.

TABLE 4

Suggestions for Childbirth Educators in Addressing the Topic of Labor Pain

- Teach that some pain/sensation has a purpose to alert the laboring woman to the need for movement, doing something different to
 encourage rotation and descent, or to push
- Teach that the sense of empowerment for accomplished tasks and goals cannot be replaced only with pain relief
- Teach that the perception of pain is different for every woman
- · Teach that every situation is unique so that no single pain management strategy works
- Teach that the word "labor" means "hard work" and not "big pain"
- Teach that labor contractions intensify until about 5 cm, and that other sensations (e.g., "downward pressure") may seem scary or painful
- Teach that the sensations of labor are not all unique to labor (e.g., bad menstrual cramps, back pain, nausea, pressure)—they have lived through these experiences before

Childbirth educators respect and promote the right of childbearing women to make informed decisions (informed consent and informed refusal) and assist childbearing women in their efforts to identify and clarify their goals... Childbirth educators should provide full, accurate, up-to-date information upon which childbearing women are able to make informed decisions. (Ethical standards section, para. 7 and para. 8)

Fostering a sense of caring, connection, and control in childbearing women is always a key factor to ensure positive birth experiences, regardless of the use of epidurals or other methods of pain management (Callister, 2011; Goldbort, 2009).

REFERENCES

- Abushaikha, L., & Sheil, E. (2006). Labor stress and nursing support: How do they relate? *Journal of International Women's Studies*, 7(4), 198–208.
- Adams, E. D., & Bianchi, A. L. (2008). A practical approach to labor support. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *37*(1), 106–115.
- Anim-Somuah, M., Smyth, R., & Howell, C. J. (2005). Epidural versus non-epidural or no analgesia in labour. *Cochrane Database of Systematic Reviews*, (4), CD000331. http://dx.doi.org/10.1002/14651858. CD000331.pub2
- Barrett, S. J., & Stark, M. A. (2010). Factors associated with labor support behaviors of nurses. *The Journal of Perinatal Education*, *19*(1), 12–18. http://dx.doi.org/10.1624/105812410X481528
- Beck, C. T. (2011). A metaethnography of traumatic childbirth and its aftermath: Amplifying causal looping. *Qualitative Health Research*, 21(3), 301–311. http:// dx.doi.org/10.1177/1049732310390698
- Bianchi, A. L., & Adams, E. D. (2009). Labor support during second stage labor for women with epidurals: Birth in this era is technology driven. Many women giving birth in hospital settings have epidurals for pain management. Yet laboring women need more than technology—they have basic needs that can't be addressed by technology alone. *Nursing for Women's Health*, *13*(1), 38–47.
- Brown, J. B., Beckhoff, C., Bickford, J., Stewart, M., Freeman, T. R., & Kasperski, M. J. (2009). Women and their

- partners' perceptions of the key roles of the labor and delivery nurse. *Clinical Nursing Research*, 18(4), 323–335. http://dx.doi.org/10.1177/1054773809341711
- Bryanton, J., Gagnon, A. J., Johnston, C., & Hatem, M. (2008). Predictors of women's perceptions of the child-birth experience. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *37*(1), 24–34.
- Callister, L. C. (2004). Making meaning: Women's birth narratives. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 33(4), 508–518.
- Callister, L. C. (2011). Ethics of infant relinquishment, cultural considerations, and obstetric conveniences. *MCN: The American Journal of Maternal Child Nursing*, 36(3), 171–177. http://dx.doi.org/10.1097/NMC.0b013e3182102236
- Callister, L. C., & Khalaf, I. (2009). Culturally diverse women giving birth: Their stories. In H. Selin (Ed.), Childbirth across cultures: Ideas and practices of pregnancy, childbirth and the postpartum (pp. 33–39). New York, NY: Springer Publishing.
- Callister, L. C., Khalaf, I., Semenic, S., Kartchner, R., & Vehvilainen-Julkunen, K. (2003). The pain of child-birth: Perceptions of culturally diverse women. *Pain Management Nursing*, 4(4), 145–154.
- Carlton, T., Callister, L. C., Christiaens, G., & Walker, D. (2009). Labor and delivery nurses' perceptions of caring for childbearing women in nurse-managed birthing units. MCN: The American Journal of Maternal Child Nursing, 34(1), 50–56.
- Carlton, T., Callister, L. C., & Stoneman, E. (2005). Decision making in laboring women: Ethical issues for perinatal nurses. *Journal of Perinatal and Neonatal Nursing*, 19(2), 145–154.
- Carolan, M. (2006). Women's stories of birth: A suitable form of research evidence? Women and Birth, 19(3), 65–71.
- Christiaens, W., & Bracke, P. (2007). Assessment of social psychological determinants of satisfaction with childbirth in a cross-national perspective. *BMC Pregnancy and Childbirth*, 7, 26. http://dx.doi.org/10.1186/1471-2393-7-26
- Dickinson, J. E., Paech, M. J., McDonald, S. J., & Evans, S. F. (2003). Maternal satisfaction with childbirth and intrapartum analgesia in nulliparous labour. Australian and New Zealand Journal of Obstetrics and Gynaecology, 43(6), 463–468.

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For additional resources that childbirth educators can use to teach expectant parents about pain relief medications, read Barbara Hotelling's "Tools for Teaching" column in this issue of JPE: "Styles Vary When Teaching Expectant Parents About Medications" (pp. 48–51).

- Durham, L., Veltman, L., Davis, P., Ferguson, L., Hacker, M., Hooker, D., . . . Van Hout, G. (2008). Standardizing criteria for scheduling elective labor inductions. MCN: The American Journal of Maternal Child Nursing, 33(3), 159–165.
- Elmir, R., Schmied, V., Wilkes, L., & Jackson, D. (2010). Women's perceptions and experiences of a traumatic birth: A meta-ethnography. *Journal of Advanced Nursing*, 66(10), 2142–2153. http://dx.doi.org/10.111/j.1365-2648.2010.05391.x
- Fisch, J. M., English, D., Pedaline, S., Brooks, K., & Simhan, H. N. (2009). Labor induction process improvement: A patient quality-of-care initiative. *Obstetrics and Gyne-cology*, 113(4), 797–803.
- Fleming, S. E., Smart, D., & Eide, P. (2011). Grand multiparous women's perceptions of birthing, nursing care, and childbirth technology. *The Journal of Perinatal Education*, 20(2), 108–117. http://dx.doi.org/10.1891/1058-1243.20.2.108
- Goldberg, A. B., Cohen, A., & Lieberman, E. (1999). Nulliparas' preferences for epidural analgesia: Their effects on actual use in labor. *Birth*, *26*(3), 139–143.
- Goldberg, H. (2009). Informed decision making in maternity care. The Journal of Perinatal Education, 18(1), 32–40. http://dx.doi.org/10.1624/10581249X396219
- Goldbort, J. G. (2009). Women's lived experience of their unexpected birthing process. *MCN: The American Journal of Maternal Child Nursing*, 34(1), 57–62. http://dx.doi.org/10.1624/10581249?X396219
- Goodall, E. K., McVittie, C., & Magill, M. (2009). Birth choice following primary cesarean section: Mothers' perceptions of the influence of health professionals on decision making. *Journal of Reproductive and Infant Psychology*, 27(1), 4–14.
- Goodman, P., Mackey, M. C., & Tavakoli, A. S. (2004). Factors related to childbirth satisfaction. *Journal of Advanced Nursing*, 46(2), 212–219.
- Gulliver, B. G., Fisher, J., & Roberts, L. (2008). A new way to assess pain in laboring women: Replacing the rating scale with a "coping" algorithm. *Nursing for Women's Health*, 12(5), 404–408.
- Hodnett, E. D. (2002). Pain and women's satisfaction with the experience of childbirth: A systematic review. *American Journal of Obstetrics and Gynecology*, 186(5, Suppl. 1), S160–S172.
- Hodnett, E. D., Gates, S., Hofmeyr, G. J., Sakala, C., & Weston, J. (2011). Continuous support for women during childbirth. *Cochrane Database of Systematic Reviews*. 16(2), CD003766. http://dx.doi.org/10.1002/14651858. CD0003766.pub3
- Institute for Healthcare Improvement. (2011). *Elective induction and augmentation bundles*. Retrieved from http://www.ihi.org/knowledge/Pages/Changes/Elective InductionandAugmentationBundles.aspx
- Kannan, S., Jamison, R. N., & Datta, S. (2001). Maternal satisfaction and pain control in women electing natural childbirth. Regional Anesthesia and Pain Medicine, 26(5), 468–472.
- Kennedy, H. P., & Lyndon, A. (2008). Tensions and teamwork in nursing and midwifery relationships. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 37(4), 426–435.

- Koehn, M. (2008). Contemporary women's perceptions of childbirth education. *The Journal of Perinatal Education*, 17(1), 11–18. http://dx.doi.org/10.1624/105812408x267916
- Lagan, B. M., Sinclair, M., & Kernohan, W. G. (2010). Internet use in pregnancy informs women's decision making: A web-based survey. *Birth*, 37(2), 106–115.
- Lally, J. E., Murtagh, M. J., Macphail, S., & Thomson, R. (2008). More in hope than expectation: A systematic review of women's expectations and experience of pain relief in labour. *BMC Medicine*, 14(6), 7. http://dx.doi. org/10.1186/1741-7015-6-7
- Lamaze International. (2006, June). Code of ethics for Lamaze certified childbirth educators. Retrieved from http://www.lamaze.org/Default.aspx?tabid=561
- Lothian, J. A. (2008). Choice, autonomy, and childbirth education. *The Journal of Perinatal Education*, 17(1), 35–38. http://dx.doi.org/10.1624/105812408x266278
- Lowe, N. K. (2004). Context and process of informed consent for pharmacologic strategies in labor pain care. *Journal of Midwifery and Women's Health*, 49(3), 250–259.
- Marmor, T. R., & Krol, D. M. (2002). Labor pain management in the United States: Understanding patterns and the issue of choice. *American Journal of Obstetrics and Gynecology*, *186*(5, Suppl. 1), S173–S180.
- Matthews, R., & Callister, L. C. (2004). Childbearing women's perceptions of nursing care that promotes dignity. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 33(4), 498–507.
- Morris, T., & McInerney, K. (2010). Media representations of pregnancy and childbirth: An analysis of reality television shows in the United States. *Birth*, *37*(2), 134–140.
- Osterman, M. J., & Martin, J. A. (2011). Epidural and spinal anesthesia use during labor: 27-state reporting area, 2008. *National Vital Statistics Report*, 59(5), 1–13, 16.
- Paech, M. (2006). "Just put it in!" Consent for epidural analgesia in labour. *Anesthesia Intensive Care*, 34(2), 147–149.
- Payant, L., Davies, B., Graham, I. D., Peterson, W. E., & Clinch, J. (2008). Nurses' intentions to provide continuous labor support to women. *Journal of Obstetric*, *Gynecologic, and Neonatal Nursing*, 37(4), 405–414.
- Raynes-Greenow, C. H., Nassar, N., Torvaldsen, S., Trevena, L., & Roberts, C. L. (2010). Assisting informed decision making for labour analgesia: A randomised controlled trial of a decision aid for labour analgesia versus a pamphlet. BMC Pregnancy and Childbirth, 10, 15. http://dx.doi.org/10.1186/1471-2393-10-15
- Redshaw, M. (2008). Women as consumers of maternity care: Measuring "satisfaction" or "dissatisfaction"? *Birth*, 35(1), 73–76.
- Roberts, L., Gulliver, B., Fisher, J., & Cloyes, K. G. (2010). The coping with labor algorithm: An alternate pain assessment tool for the laboring woman. *Journal of Midwifery and Women's Health*, 55(2), 107–116.
- Romano, A. M., & Lothian, J. A. (2008). Promoting, protecting, and supporting normal birth: A look at the evidence. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 37(1), 94–104.

- Rosenthal, M. S. (2006). Socioethical issues in hospital birth: Troubling tales from a Canadian sample. *Sociological Perspectives*, 49(3), 369–390.
- Rudman, A., El-Khouri, B., & Waldenström, U. (2007). Women's satisfaction with intrapartum care—A pattern approach. *Journal of Advanced Nursing*, 59(5), 474–487.
- Salter, K. (2009). Beating the trauma of a bad birth experience. *Mental Health Today*, 14–15.
- Simkin, P. (2006). What makes a good birth and why does it matter? *International Journal of Childbirth Education*, 21(3), 4–6.
- Simkin, P., & Hull, K. (2011). Pain, suffering, and trauma in labor and prevention of subsequent posttraumatic stress disorder. *The Journal of Perinatal Education*, 20(3), 166–176. http://dx.doi.org/10.1891/1058-1243.20.3.166
- Simmonds, A. H. (2008). Autonomy and advocacy in perinatal nursing practice. *Nursing Ethics*, *15*(3), 360–370.
- Soet, J. E., Brack, G. A., & Dilorio, C. (2003). Prevalence and predictors of women's experience of psychological trauma during childbirth. *Birth*, *30*(1), 36–46.
- Theroux, R. (2011). Media as a source of information on pregnancy and childbirth. *Nursing for Women's Health*, 15(1), 62–67. http://dx.doi.org/10.1111/j.1751-486X. 2011.01612.x
- Tiedje, L. B., Price, B., & You, M. (2008). Childbirth is changing: What now? *MCN: The American Journal of Maternal/Child Nursing*, 33(3), 144–150.
- Torres, J. M., & De Vries, R. G. (2009). Birthing ethics: What mothers, families, childbirth educators, nurses, and physicians should know about the ethics of

- childbirth. *The Journal of Perinatal Education*, 18(1), 12–24. http://dx.doi.org/10.1624/105812409x396192
- Transforming Maternity Care Symposium Steering Committee, Angood, P. B., Armstrong, E. M., Ashton, D., Burstin, H., Corry, M. P., . . . Salganicoff, A. (2010). Blueprint for action: Steps toward a high-quality, high-value maternity care system. *Women's Health Issues*, 20(1 Suppl.), S18–S49. http://dx.doi.org/10.1016/j.whi.2009.11.007
- Transforming Maternity Care Vision Team, Carter, M. C., Corry, M., Delbanco, S., Foster, T. C., Friedland, R., . . . Simpson, K. R. (2010). 2020 vision for a high-quality, high-value maternity care system. *Women's Health Issues*, 20(1 Suppl.), S7–S17. http://dx.doi.org/10.1016/j. whi.2009.11.006
- Van Manen, M. (1997). Researching lived experience: Human science for an action sensitive pedagogy (2nd ed.). Ontario, Canada: Althouse Press.
- Zwelling, E. (2008). The emergence of high-tech birthing. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *37*(1), 85–93. http://dx.doi.org/10.1111/j.1552-6909. 2007.00211.x

RYOKO HIDAKA is an associate professor in the Department of Nursing at the Prefectural University of Hiroshima in Japan. She has had 14 years of clinical experience in acute care perinatal units in the United States. LYNN CLARK CALLISTER is a professor emerita of maternal—child nursing at Brigham Young University in Provo, Utah, and a fellow in the American Academy of Nursing.